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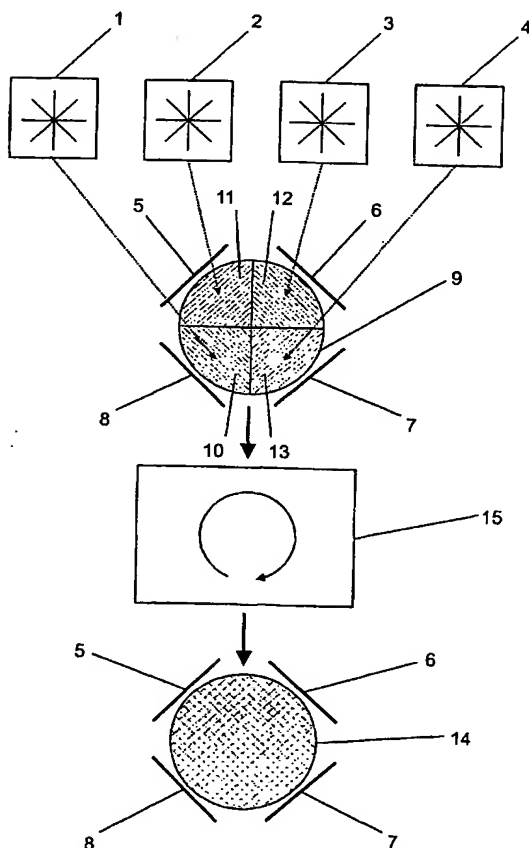
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(54) Title: **METHOD OF RECONSTRUCTING AN MR IMAGE**



(57) Abstract: The invention relates to a method of reconstructing an MR image (14) from MR signals (1, 2, 3, 4) that are acquired in parallel by a plurality of receiving coils (5, 6, 7, 8) with incomplete sampling of the spatial frequency space, the reconstructed MR image (14) being calculated iteratively as the solution of a system of linear equations. To provide a more highly developed method for parallel SENSE imaging that is an improvement on the prior art in respect of the computing time required for image reconstruction, the invention proposes that the iteration process (15) begin with a starting image (9) which approximates to the MR image to be reconstructed (14), in such a way that undersampling artifacts are suppressed in the intermediate solutions of the system of equations that are obtained during the course of the iteration process.

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